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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,538	09/28/2001	Ju Hyun Lee	MRE-0010A	2653

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FLESHNER & KIM, LLP  
P.O. BOX 221200  
CHANTILLY, VA 20153

EXAMINER

LUU, THANH X

ART UNIT

PAPER NUMBER

2878

DATE MAILED: 08/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/964,538

Applicant(s)

LEE ET AL.

Examiner

Thanh X Luu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/311,276.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the light sensing element comprises a CCD, a CMOS image sensor, a photo transistor, a position sensitive detector, a camera and a scanner must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

3. Claims 1 and 15 are objected to because of the following informalities:

In claim 1, "the electrode layer" lacks proper antecedent basis, as it is unclear if it refers to the transparent electrode layer or another different electrode layer.

In claim 15, "the light sensing elements" lacks proper antecedent basis.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 9, 10, 12-14, 16, 23, 24, 28, 29, 36, 37 and 39 are rejected under 35 U.S.C. 102(e) as being anticipated by Hallibert et al. (U.S. Patent 6,002,786).

Regarding claims 1, 9, 10, 12-14, 16, 23, 24, 28, 29, 36, 37 and 39, Hallibert et al. disclose (see Figure 1) a contact imaging system, comprising: a light sensing element (26); a transparent insulating layer (10) overlaying the light sensing element; a transparent electrode layer (12) overlaying the transparent insulating layer; a luminescence layer (14) overlaying the electrode layer; and a stray light shield layer or protective layer (32 or unlabeled layer directly underneath finger) overlaying the luminescence layer, wherein the luminescence layer and the electrode layer are configured such that an electric field can be applied between an object to be imaged and the electrode layer. Hallibert et al. further disclose (see column 3, lines 60-65) the light sensing element comprises a camera or a position sensitive detector. Hallibert et al. also disclose (see column 4, lines 5-12) a dark pigment that acts to enhance contrast and has first and second layers. Hallibert et al. also disclose (see Figure 1) a penetrating control layer (30) between the light shield (32) to limit an amount of pigment that passes to the luminescence layer.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2, 6-8, 11, 15, 20-22, 25-27, 30, 33-35, 38 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hallibert et al.

Regarding claims 2 and 30, Hallibert et al. disclose the claimed invention as set forth above. Hallibert et al. further do not specifically disclose using an adhesive to bond certain layers. However, adhesives in the art are notoriously well known. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a transparent adhesive as claimed in the apparatus of Hallibert et al. to improve the integrity of the device.

Regarding claims 6-8, 11, 15, 20-22, 25, 33-35 and 38, Hallibert et al. disclose the claimed invention as set forth above. Hallibert et al. do not disclose the different light sensing elements as claimed. However, CCDs, CMOS image sensors, scanners, and photo transistors are notoriously well known. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide any comparable light sensing element in the apparatus of Hallibert et al. to obtain any desired imaging response.

Regarding claims 26, 27 and 40, Hallibert et al. disclose the claimed invention as set forth above. Hallibert et al. do not specifically disclose the protective layer is

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hydrophobic or abrasion resistant. However, protective layers are well known to be water resistant and scratch resistant. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide such features in the protective layer to further protect the apparatus and improve the life of the device.

8. Claims 3-5, 17-19, 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hallibert et al. in view of Henry (U.S. Patent 4,980,553).

Regarding claims 3-5, 17-19, 31 and 32, Hallibert et al. disclose the claimed invention as set forth above. Hallibert et al. do not specifically disclose the light sensing element comprises a PN junction diode as claimed. Henry teaches (see column 5, lines 45-65) of a similar imaging system having a reversed biased PN junction diode. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a PN junction diode as claimed in the apparatus of Hallibert et al. in view of Henry to obtain cost effective and compact imaging.

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh X. Luu whose telephone number is (703) 305-0539. The examiner can normally be reached on Monday-Friday from 6:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta, can be reached on (703) 308-4852. The fax phone number for the organization where the application or proceeding is assigned is (703) 308-7722.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

txl  
August 6, 2003



Thanh X. Luu  
Patent Examiner